



SEQUENCE LISTING

RECEIVED

JAN 22 2001

TECH CENTER 1600/2900

<110> Dong, Fang
Lyamichev, Victor
Prudent, James
Fors, Lance
Neri, Bruce
Brow, Mary Ann
Anderson, Todd
Dahlberg, James

<120> Target-Dependent Reactions Using Structure-Bridging
Oligonucleotides

<130> FORS-04012

<140> 09/402,618

<141> 2000-07-18

<150> PCT/US98/03194

<151> 1998-05-05

<160> 123

<170> PatentIn version 3.0

<210> 1

<211> 391

<212> DNA

<213> Mycobacterium tuberculosis

<400> 1

agctcgatg gcaccggaac cggtaaggac gcgatcacca gcggcatcga ggtcgatgg 60
acgaacaccc cgacgaaatg ggacaacagt ttctcgaga tctgtacgg ctacgagtgg 120
gagctgacga agagccctgc tggcgcttgg caatacaccg ccaaggacgg cgccggtgcc 180
ggcaccatcc cggaccggtt cggcgggcca gggcgctccc cgacgatgct ggccactgac 240
ctctcgctgc ggggtggatcc gatctatgag cggatcacgc gtcgctgggt ggaacacccc 300
gaggaattgg ccgacgagtt cgccaaggcc tggtaacaagc tgatccaccg agacatgggt 360
cccgttgcca gataccttgg gccggtggtc c 391

<210> 2
 <211> 391
 <212> DNA
 <213> Mycobacterium tuberculosis
 <400> 2
 agctcgatg gcaccggaac cggtaaggac gcgatcacca ccggcatcga ggtcgatgg 60
 acgaacaccc cgacgaaatg ggacaacagt ttctcgaga tctgtacgg ctacgagtgg 120
 gagctgacga agagccctgc tggcgcttgg caatacaccc ccaaggacgg cgccggtgcc 180
 ggcaccatcc cggaccggtt cggcgggcca gggcgctccc cgacgatgct ggccactgac 240
 ctctcgctgc ggggtggatcc gatctatgag cggatcacgc gtcgctggct ggaacacccc 300
 gaggaattgg ccgacgagtt cgccaaggcc tggtaacaagc tgatccaccg agacatgggt 360
 cccgttgcca gataccttgg gccgctggtc c 391
 <210> 3
 <211> 391
 <212> DNA
 <213> Mycobacterium tuberculosis
 <400> 3
 agctcgatg gcaccggaac cggtaaggac gcgatcacca ccggcatcga ggtcgatgg 60
 acgaacaccc cgacgaaatg ggacaacagt ttctcgaga tctgtacgg ctacgagtgg 120
 gagctgacga agagccctgc tggcgcttgg caatacaccc ccaaggacgg cgccggtgcc 180
 ggcaccatcc cggaccggtt cggcgggcca gggcgctccc cgacgatgct ggccactgac 240
 ctctcgctgc ggggtggatcc gatctatgag cggatcacgc gtcgctggct ggaacacccc 300
 gaggaattgg ccgacgagtt cgccaaggcc tggtaacaagc tgatccaccg agacatgggt 360
 cccgttgcca gataccttgg gccgctggtc c 391
 <210> 4
 <211> 391
 <212> DNA
 <213> Mycobacterium tuberculosis
 <400> 4
 agctcgatg gcaccggaac cggtaaggac gcgatcacca ccggcatcga ggtcgatgg 60
 acgaacaccc cgacgaaatg ggacaacagt ttctcgaga tctgtacgg ctacgagtgg 120
 gagctgacga agagccctgc tggcgcttgg caatacaccc ccaaggacgg cgccggtgcc 180
 ggcaccatcc cggaccggtt cggcgggcca gggcgctccc cgacgatgct ggccactgac 240

ctctcgctgc ggggtggatcc gatctatgag cggatcacgc gtcgctggct ggaacacccc 300
 gaggaattgg cgcacgagtt cgccaaggcc tggataaagc tgatccaccg agacatgggt 360
 cccgttgcca gataccttgg gccggtggtc c 391
 <210> 5
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 5
 agctcgatatg gcaccggaac 20
 <210> 6
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 6
 ttgacctccc acccgacttg 20
 <210> 7
 <211> 21
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 7
 agctcgatatg gcaccggaac c 21
 <210> 8
 <211> 20
 <212> DNA

<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 8	
ggaccagcgg cccaaggtat	20
<210> 9	
<211> 22	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 9	
ggaccaccgg cccaaggtat ct	22
<210> 10	
<211> 21	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 10	
tttttgccgc tggatgatcgc g	21
<210> 11	
<211> 12	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 11	
ggagagccat ag	12

<210>	12	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	12	
	tggtctgcgg a	11
<210>	13	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	13	
	ggacgaccgg g	11
<210>	14	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	14	
	ggagatttgg g	11
<210>	15	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	15	
	ccgcgagact g	11
<210>	16	
<211>	12	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	16	
	ctagccgagt ag	12
<210>	17	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	17	
	tggtgggtcg c	11
<210>	18	
<211>	11	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	18	
	ccgcgagacc g	11

<210> 19
 <211> 11
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 19
 ccgcaagacc g 11
 <210> 20
 <211> 289
 <212> DNA
 <213> Hepatitis C virus
 <400> 20
 gattctgtct tcacgcagaa agcgtctagc catggcgta gtatgagtgt cgtgcagcct 60
 ccaggacccc ccctcccggg agagccatag tggctctgcgg aaccggtgag tacaccggaa 120
 ttgccaggac gaccgggtcc tttcttggat caaccgcctc aatgcctgga gatttggggcg 180
 tgcccccgca agactgctag ccgagtagtg ttgggtcgcg aaaggccttg tggtagtgc 240
 tgataggggtg cttgcgagtg ccccgggagg tctcgtagac cgtgcaatc 289
 <210> 21
 <211> 286
 <212> DNA
 <213> Hepatitis C virus
 <400> 21
 gattctgtct tcacgcagaa agcgtctagc catggcgta gtatgagtgt cgtgcagcct 60
 ccaggatccc ccctcccggg agagccatag tggctctgcgg aaccggtgag tacaccggaa 120
 ttgccaggac gaccgggtcc tttcttggat caaccgcctc aatgcctgga gatttggggcg 180
 tgcccccgcg agactgctag ccgagtagtg ttgggtcgcg aaaggccttg tggtagtgc 240
 tgataggggtg cttgcgagtg ccccgggagg tctcgtagac cgtgca 286
 <210> 22
 <211> 289
 <212> DNA
 <213> Hepatitis C virus

<400> 22
 gattctgtct tcacgcagaa agcgtctagc catggcggtta gtatgagtgt cgtacagcct 60
 ccaggccccc ccctcccggg agagccatag tggctctgcgg aaccggtgag tacaccggaa 120
 ttgccgggaa gactgggtcc tttcttggat aaaccactc tatgcccggc catttgggcg 180
 tgcccccgca agactgctag ccgagtagcg ttgggttcg cg aaaggccttg tggtagtacc 240
 tgataggggtg cttgcgagta ccccgggagg tctcgtagac cgtgcaatc 289
 <210> 23
 <211> 289
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 23
 gattctgtct tcacgcagaa agcgcctagc catggcggtta gtacgagtgt cgtgcagcct 60
 ccaggacccc ccctcccggg agaaccatag tggctctgcgg aaccggtgag tacaccggaa 120
 tcgctgggggt gaccgggtcc tttcttggag caaccgcctc aataccaga aatttgggcg 180
 tgcccccgcg agatcactag ccgagtagtg ttgggttcg cg aaaggccttg tggtagtacc 240
 tgataggggtg cttgcgagtg ccccgggagg tctcgtagac cgtgcaatc 289
 <210> 24
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 24
 ctcgcaagca ccctatca 18
 <210> 25
 <211> 21
 <212> DNA
 <213> Artificial/Unknown

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 25
 gcagaaagcg tctagccatg g 21
 <210> 26
 <211> 244
 <212> DNA
 <213> Hepatitis C virus
 <400> 26
 gcagaaagcg tctagccatg gcgttagtat gagggtcgtg cagcctccag gacccccct 60
 cccgggagag ccatagtggc ctgcggaacc ggtgagtaca ccggaattgc caggacgacc 120
 gggtcctttc ttggatcaac ccgctcaatg cctggagatt tgggcgtgcc cccgcaagac 180
 tgctagccga gtagtggttg gtcgcgaaag gccttggtg actgcctgat aggggtgcttg 240
 cgag 244
 <210> 27
 <211> 244
 <212> DNA
 <213> Hepatitis C virus
 <400> 27
 gcagaaagcg tctagccatg gcgttagtat gagggtcgtg cagcctccag gtccccccct 60
 cccgggagag ccatagtggc ctgcggaacc ggtgagtaca ccggaattgc caggacgacc 120
 gggtcctttc ttggatcaac ccgctcaatg cctggagatt tgggcgtgcc cccgcgagac 180
 tgctagccga gtagtggttg gtcgcgaaag gccttggtg actgcctgat aggggtgcttg 240
 cgag 244
 <210> 28
 <211> 244
 <212> DNA
 <213> Hepatitis C virus
 <400> 28
 gcagaaagcg tctagccatg gcgttagtat gagggtcgtg cagcctccag gccccccct 60
 cccgggagag ccatagtggc ctgcggaacc ggtgagtaca ccggaattgc cgggaagact 120
 gggtcctttc ttggataaac ccactctatg cccggccatt tgggcgtgcc cccgcaagac 180

tgctagccga gtagcggttg gttgcgaaag gccttgtggt actgcctgat aggggtgcttg 240
 cgag 244
 <210> 29
 <211> 244
 <212> DNA
 <213> Hepatitis C virus
 <400> 29
 gcagaaagcg cctagccatg gcgttagtac gagggtcgtg cagcctccag gacccccct 60
 cccgggagaa ccatagtggc ctgcggaacc ggtgagtaca ccggaatcgc tggggtgacc 120
 gggtcctttc ttggagcaac ccgctcaata cccagaaatt tgggcgtgcc cccgcgagat 180
 cactagccga gtagtggttg gtcgcgaaag gccttgtggt actgcctgat aggggtgcttg 240
 cgag 244
 <210> 30
 <211> 216
 <212> DNA
 <213> Hepatitis C virus
 <400> 30
 cagaaagggg ttagccatgg ggtagtatg agtggtcgtc agcctccagg cccccccctc 60
 cccgggagagc catagtgggc tgcggaaccg gtgagtacac ccgaattgcc gggaagactg 120
 ggtcctttct tggataaacc cactctatgc ccggccattt gggcgtgccc ccgcaagact 180
 gctagccgag tagcggtggg ttgcgaaagg ccttgt 216
 <210> 31
 <211> 244
 <212> DNA
 <213> Hepatitis C virus
 <400> 31
 cagaaagggg ttagccatgg cgtagtatg agtggtcgtc agcctccagg accccccctc 60
 cccgggagagc catagtgggc tgcggaaccg gtgagtacac ccgaattgcc aggacgaccg 120
 ggtcctttct tggataaaac ccgctcaatg cctggagatt tgggcgtgcc cccgcaagac 180
 tgctagccga gtagtggttg gtcgcgaaag gccttgtggt actgcctgat aggggtgcttg 240
 caag 244

<210> 32
 <211> 239
 <212> DNA
 <213> Hepatitis C virus
 <400> 32
 gcagaaaggt ttagccatgg gttagtatga gtgtcgtgca gcctccagga cccccctcc 60
 cgggagagcc atagtggctc gcggaaccgg tgagtacacc ggaattgcca ggacgaccgg 120
 gtccttttctt ggattaaccc gctcaatgcc tggagatttg ggcgtgcccc cgcaagactg 180
 ctagccgagt agtggtgggt cgcgaaaggc cttgtggtac tgctgatag ggtgcttgc 239
 <210> 33
 <211> 240
 <212> DNA
 <213> Hepatitis C virus
 <400> 33
 gcagaaaggt ttagccatgg ggtagtatg agtgtcgtac agcctccagg accccccctc 60
 ccgggagagc catagtggtc tcggaaccg gtgagtacac cggaattgcc aggacgaccg 120
 ggtcctttctt tggataaacc cgctcaatgc ctggagattt gggcgtgccc ccgcaagact 180
 gctagccgag tagtggtggg tcgcgaaagg cttgtggta ctgctgata ggggtgcttgc 240
 <210> 34
 <211> 240
 <212> DNA
 <213> Hepatitis C virus
 <400> 34
 gcagaaaggg ttagccatg gcgttagtat gagtgtcgta cagcctccag gccccccct 60
 cccgggagag ccatagtggc ctgcggaacc ggtgagtaca ccggaattac cggaaagact 120
 gggtcctttc ttggataaac cactctatg tccggtcatt tgggcgtgcc cccgcaagac 180
 tgctagccga gtagcggtgg gttgcaaagg cttgtggta ctgctgata ggggtgcttgc 240
 <210> 35
 <211> 240
 <212> DNA
 <213> Hepatitis C virus

<400> 35
 cagaaagggt ttagccatgg ggttagtacg agtgtcgtgc agcctccagg cccccccctc 60
 cccgggagagc catagtgggtc tgcggaaccg gtgagtacac cggaatcgct ggggtgaccg 120
 ggtcctttct tggagcaacc cgctcaatac ccagaaattt gggcgtgccc ccgcgagatc 180
 actagccgag tagtgttggg tcgcgaaagg ctttgtggta ctgcctgata gggtgcttgc 240
 <210> 36
 <211> 239
 <212> DNA
 <213> Hepatitis C virus
 <400> 36
 agaaagcgtt tagccatggc gttagtatga gtgttggtgca gcctccagga cccccctcc 60
 cgggagagcc atagtgggtc gcggaaccgg tgagtacacc ggaattgcca ggacgaccgg 120
 gtcctttctt ggatcaaccc gctcaatgcc tggagatttg ggcgtgcccc cgcaagactg 180
 ctagccgagt agtgttgggt cgcgaaaggc ctttgtgtac tgctgatag ggtgcttgc 239
 <210> 37
 <211> 232
 <212> DNA
 <213> Hepatitis C virus
 <400> 37
 gtttagccat ggcgttagta tgagtgtcgt gcagcctcca ggaccccccc tcccgggaga 60
 gccatagtgg tctgcggaac cggtagtac accggaattg ccaggacgac cgggtccttt 120
 cttggatcaa cccgctcaat gcctggagat ttgggcgtgc ccccgcgaga ccgctagccg 180
 agtagtgttg ggtcgcgaaa ggccttggtg tactgcctga tagggtgctt gc 232
 <210> 38
 <211> 240
 <212> DNA
 <213> Hepatitis C virus
 <400> 38
 gcagaaagcg ttagccatg gcgttagtac gagtgtcgtg cagcctccag gacccccct 60
 cccgggagag ccatagtggc ctgcggaacc ggtgagtaca ccggaatcgc tggggtgacc 120
 gggtcctttc ttggaacaac ccgctcaata ccagaaatt tgggcgtgcc ccccgagat 180
 cactagccga gtagtgttgg gtcgcgaaag gccttggtgt actgcctgat aggggtgctt 240

<210> 39
 <211> 44
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 39
 tgctctctgg tcgctgtctg aaagacagcg tggctctctg taat 44
 <210> 40
 <211> 44
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 40
 tgctctctgg tcgctgtctg aaagactccg tggctctctg taat 44
 <210> 41
 <211> 44
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 41
 tgctctctgg tcgctgtctg aatttttttt tggctctctg taat 44
 <210> 42
 <211> 14
 <212> DNA
 <213> Artificial/Unknown

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	42	
	agaccattac caga	14
<210>	43	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	43	
	gagaccatta ccagag	16
<210>	44	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	44	
	agagaccatt accagaga	18
<210>	45	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	45	
	agagaccatt acaagcga	18

<210>	46	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	46	
	agcgaacatt accagaga	18
<210>	47	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	47	
	agagaccaac cagaga	16
<210>	48	
<211>	9	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	48	
	agagaccat	9
<210>	49	
<211>	9	
<212>	DNA	
<213>	Artificial/Unknown	

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	49	
taccagaga		9
<210>	50	
<211>	10	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	50	
accagagagc		10
<210>	51	
<211>	10	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	51	
tcagacagcg		10
<210>	52	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	52	
agtggctctgc ggaaccgg		18

<210>	53	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	53	
	agtgtcgttt ggaaccgg	18
<210>	54	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	54	
	agtgtcgtaa ggaaccgg	18
<210>	55	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	55	
	agtgtcggtca ggaaccgg	18
<210>	56	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	

<220>	
<221> misc_feature	
<223> Synthetic	
<400> 56	
agtgtcgtgg aaccgg	16
<210> 57	
<211> 18	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 57	
agtgtcgttt ggatccgg	18
<210> 58	
<211> 18	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 58	
agtgacgttt ggaaccgg	18
<210> 59	
<211> 8	
<212> DNA	
<213> Artificial/Unknown	
<220>	
<221> misc_feature	
<223> Synthetic	
<400> 59	
ggaaccgg	8

<210>	60	
<211>	20	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	60	
	ttttgtgagt acaccggaat	20
<210>	61	
<211>	14	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	61	
	ttttgtgagt acac	14
<210>	62	
<211>	15	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	62	
	tgagtacacc ggaat	15
<210>	63	
<211>	33	
<212>	DNA	
<213>	Artificial/Unknown	

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	63	
	attccggtgt actcaccggt tccaaacgac act	33
<210>	64	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	64	
	cagcctcccc ttcttgga	18
<210>	65	
<211>	20	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	65	
	agtgtcgttt ggaattaatt	20
<210>	66	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	66	
	gcgaaaggcc ttgtgg	16

<210>	67	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	67	
	acagcctcca ggaccc	16
<210>	68	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	68	
	gcagcctcca ggaccc	16
<210>	69	
<211>	193	
<212>	DNA	
<213>	Mycobacterium tuberculosis	
<400>	69	
	cgtggaggcg atcacaccgc agacgttgat caacatccgg ccggtggtcg ccgcgatcaa	60
	ggagttcttc ggcaccagcc agctgagcca attcatggac cagaacaacc cgctgtcggg	120
	gttgaccac aagcgccgac tgcggcgct ggggcccggc ggtctgtcac gtgagcgtgc	180
	cgggctggag gtc	193
<210>	70	
<211>	26	
<212>	DNA	
<213>	Artificial/Unknown	

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 70
 cgtggaggcg atcacaccgc agacgt 26
 <210> 71
 <211> 25
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 71
 gacctccagc ccggcacgct cacgt 25
 <210> 72
 <211> 128
 <212> DNA
 <213> Mycobacterium tuberculosis
 <400> 72
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gcggtctgtc 120
 acgtgagc 128
 <210> 73
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 73
 cgccgcgatc aaggagttct 20
 <210> 74
 <211> 20

<212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 74
 gctcacgtga cagaccgccg 20
 <210> 75
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 75
 tgacagaccg ccgggccc 18
 <210> 76
 <211> 121
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 76
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gcggtctgtc 120
 a 121
 <210> 77
 <211> 18
 <212> DNA
 <213> Artificial/Unknown

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 77
 agacagaccg ccggggccc 18
 <210> 78
 <211> 121
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 78
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctgggggccg gcggtctgtc 120
 t 121
 <210> 79
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 79
 acagaccgcc gggcccca 18
 <210> 80
 <211> 119
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic

<400> 80
 cgccgcgatac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagegccg actgtcggcg ctggggcccg gcggtctgt 119
 <210> 81
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 81
 ccagaccgcc gggcccca 18
 <210> 82
 <211> 119
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 82
 cgccgcgatac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagegccg actgtcggcg ctggggcccg gcggtctgg 119
 <210> 83
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 83
 cagaccgccg ggccccag 18
 <210> 84
 <211> 118

<212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 84
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gcggtctg 118
 <210> 85
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 85
 gagaccgccc ggccccag 18
 <210> 86
 <211> 118
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 86
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gcggtctc 118
 <210> 87
 <211> 20
 <212> DNA
 <213> Artificial/Unknown

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 87
 ccgccggggcc ccagcgccga 20
 <210> 88
 <211> 114
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 88
 cgccgcgatac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctgggggccg gcgg 114
 <210> 89
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 89
 gcgccggggcc ccagcgccga 20
 <210> 90
 <211> 114
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic

<400> 90
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gcgc 114
 <210> 91
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 91
 cggccggggcc ccagcgccga 20
 <210> 92
 <211> 114
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 92
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg gccg 114
 <210> 93
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 93
 cgggccccag cgccgaca 18
 <210> 94
 <211> 110

<212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 94
 cgccgcgac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggcccg 110
 <210> 95
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 95
 agggccccag cgccgaca 18
 <210> 96
 <211> 110
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 96
 cgccgcgac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggggccct 110
 <210> 97
 <211> 18
 <212> DNA
 <213> Artificial/Unknown

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 97
 ccccagcgcc gacagtcg 18
 <210> 98
 <211> 106
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 98
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctgggg 106
 <210> 99
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 99
 tcccagcgcc gacagtcg 18
 <210> 100
 <211> 106
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic

<400> 100
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcgccg actgtcggcg ctggga 106
 <210> 101
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 101
 cgcttggtggg tcaaccccgga 20
 <210> 102
 <211> 87
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 102
 cgccgcgatc aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagcg 87
 <210> 103
 <211> 20
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 103
 agcttggtggg tcaaccccgga 20

<210> 104
 <211> 87
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 104
 cgccgcgatac aaggagttct tcggcaccag ccagctgagc caattcatgg accagaacaa 60
 cccgctgtcg gggttgaccc acaagct 87
 <210> 105
 <211> 16
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 105
 gtgacagagt tggtct 16
 <210> 106
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 106
 gtgacagatt gttgttct 18
 <210> 107
 <211> 18
 <212> DNA
 <213> Artificial/Unknown

<220>
 <221> misc_feature
 <223> Synthetic
 <400> 107
 gtgacagagc gttgttct 18
 <210> 108
 <211> 18
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <400> 108
 gtgacagaaa gttgttct 18
 <210> 109
 <211> 16
 <212> DNA
 <213> Artificial/Unknown
 <220>
 <221> misc_feature
 <223> Synthetic
 <220>
 <221> misc_feature
 <222> (8)..(8)
 <223> The A at this position is linked to spacers with abasic sugar labels
 <400> 109
 gtgacagagt tgttct 16
 <210> 110
 <211> 18
 <212> DNA
 <213> Artificial/Unknown

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	110	
	tcacgtgagc gtccatga	18
<210>	111	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	111	
	cagaccgcgc acagcggg	18
<210>	112	
<211>	17	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	112	
	gctcacgata ccccgac	17
<210>	113	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	113	
	tgctcacgat accccgac	18

<210>	114	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	114	
	cgccggggcgc tcaacccc	18
<210>	115	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	115	
	acagtcgggc gggtgttc	18
<210>	116	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	116	
	cgggccccta tgtgggtc	18
<210>	117	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	

<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	117	
	ctcacgtgta tctggtcc	18
<210>	118	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	118	
	tgacagacgt tgttct	16
<210>	119	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	119	
	ccccagcggc gttgttct	18
<210>	120	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	120	
	gtgtcgtttg gaaccg	16

<210>	121	
<211>	16	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	121	
	tgggcgttgc ttgtgg	16
<210>	122	
<211>	18	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	122	
	ttgggcgttg cttgtggt	18
<210>	123	
<211>	13	
<212>	DNA	
<213>	Artificial/Unknown	
<220>		
<221>	misc_feature	
<223>	Synthetic	
<400>	123	
	tccttgatcg cgg	13